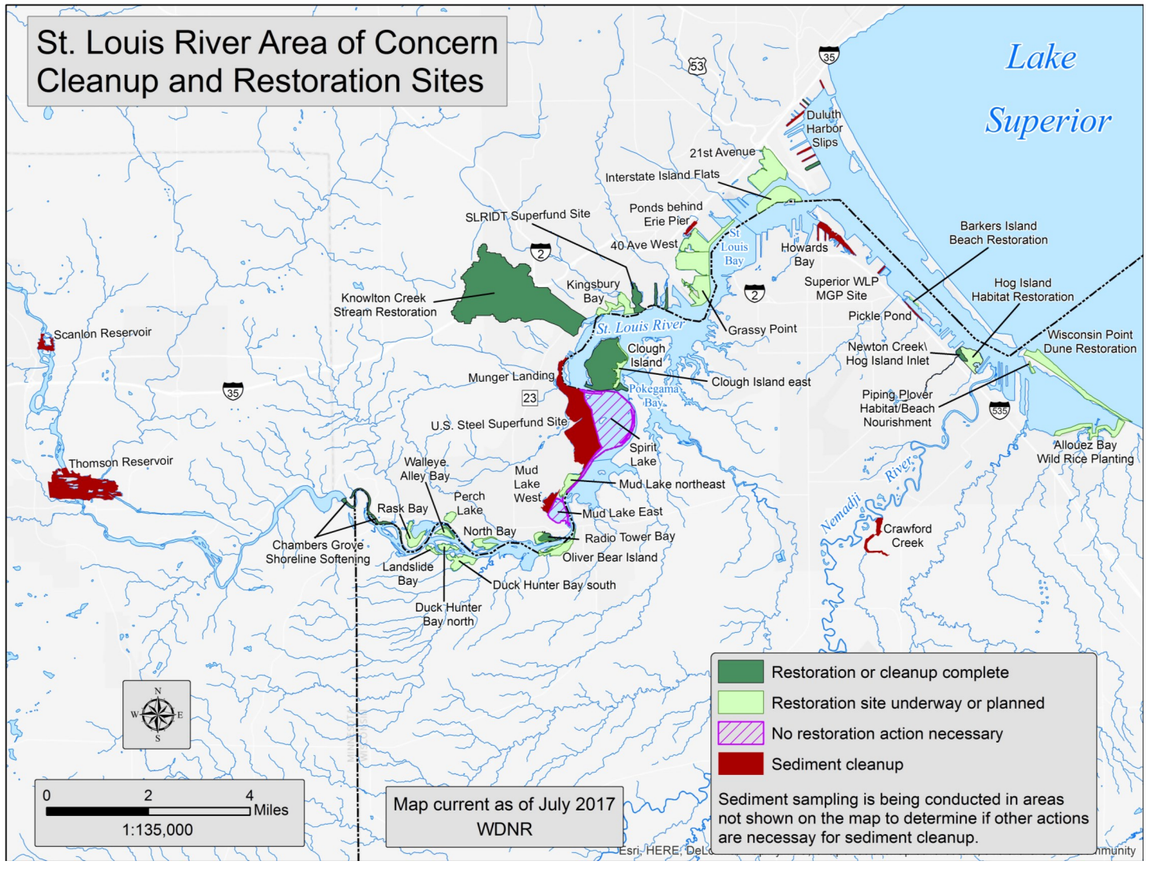
St. Louis River Area of Concern

Reaching our targets will lead us to our goal of delisting the AOC, which means the ecological benefits of the St. Louis River have been restored to an acceptable level. We will have achieved this when public uses are no longer impaired by legacy contamination and, native plants and wildlife are sustainably protected. As toxic sediment is removed and habitat restoration continues, the river is becoming a more and more valuable resource for recreation and the local economy.

Sumner Matteson

Federally endangered piping plover.



To learn more about St. Louis River AOC projects and progress visit http://dnr.wi.gov, search "St. Louis River AOC." For more details, refer to the Area of Concern Remedial Action Plan Updates.

St. Louis River —part of the largest fresh surface water resource in the world—the Great Lakes ecosystem

Wisconsin DNR Office of Great Waters

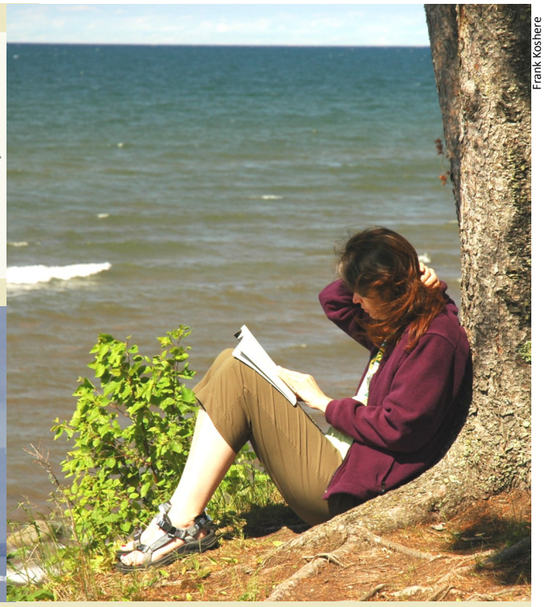
Brochure developed by the UW-Extension Regional Natural Resources Program and the Wisconsin Department of Natural Resources, Office of Great Waters. Graphic design by Jeffrey J. Strobel, UW-Extension Environmental Resources Center.

St. Louis River Area of Concern

BENEFICIAL USE IMPAIRMENT RESTORATION REPORT

Summer 2017

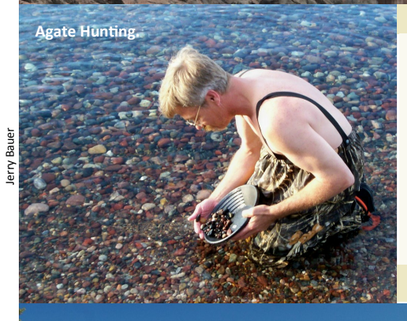
The St. Louis River was designated an Area of Concern (AOC) in 1987. Improper management of municipal and industrial waste led to contaminated sediments, poor water quality, and impaired public benefits of the St. Louis River.



Frank Koshere

Philip Schwarz

Wisconsin Point Lighthouse.



Jerry Bauer

Agate Hunting.

The Wisconsin Department of Natural Resources, Minnesota Pollution Control Agency, Minnesota Department of Natural Resources, the Fond du Lac Band of Lake Superior Chippewa, and citizen groups identified nine Beneficial Use Impairments (BUIs) to target here for improving the river.

See the progress report inside ➡

Frank Koshere

St. Louis River Estuary.

Volunteer monitors for Piping Plovers.

St. Louis River Alliance

St. Louis River AOC – Restoration Status Update

Summer 2017

Tackling AOC problems, known as Beneficial Use Impairments in the Area of Concern program, requires several steps. We must understand the causes and define the extent of the impairments through monitoring, assessment, and data analysis. We then determine the necessary actions to address the problems, and implement them.

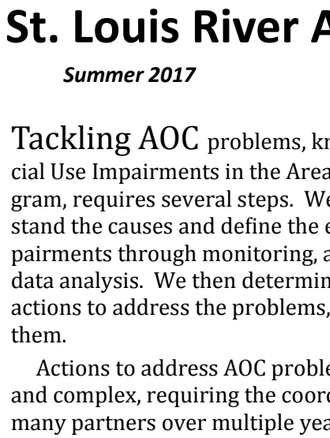
Actions to address AOC problems can be large and complex, requiring the coordinated efforts of many partners over multiple years. Upon completing the necessary actions, we must verify through monitoring that we have achieved our goals for cleanup and restoration. Once the goals have been met and the problems have been addressed, the AOC designation can be removed.

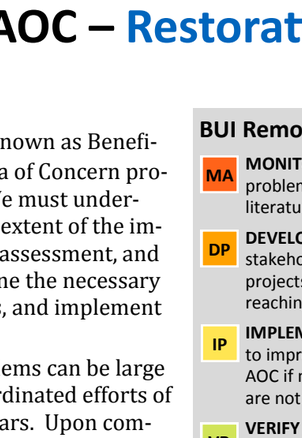
This update shows the current status of the removal process for nine impairments of the St. Louis River AOC – *complete, underway, or not started* – and the next steps. Dates in parentheses indicate the anticipated project completion.

BUI Removal Phases:

- **MA** – **MONITOR & ASSESS**: define the problem, gather data and review literature, consult with experts.
- **DP** – **DEVELOP AOC PROJECTS**: engage stakeholders to develop the set of projects that are necessary for reaching AOC goals.
- **IP** – **IMPLEMENT PROJECTS**: take action to improve conditions within the AOC if monitoring data shows goals are not being met.
- **VR** – **VERIFY RESULTS**: after actions have been taken, monitor to determine if target has been met.
- **RM** – **FORMAL BUI REMOVAL**: targets have been met. BUI removal documentation is being prepared or reviewed, or has been submitted.

Status of Each Phase: Not Started ○ Underway → Complete ★





Soil is analyzed during Clough Island survey (above left). An engineer samples sediment at Crawford Creek (middle). Biologists monitor Little Pokegama Bay (above right). Petroleum-contaminated sediment is removed from Newton Creek (lower right).

Dredging activities for commerce or navigation are restricted

NEXT STEPS:

- Continue cleanup of riverbed and harbor sites identified as pollution hotspots (through 2023).
- Test additional areas for possible contamination and collaborate with partners to share results (ongoing).
- Update and enhance the sediment quality database (ongoing).

MA → DP → IP → VR ○ RM ○

Fish and wildlife populations are degraded

NEXT STEPS:

- Implement nesting habitat restoration to support piping plover recovery (through 2019).
- Monitor fish populations (yearly) and determine if contaminant study of Lake Sturgeon is needed.

MA → DP → IP → VR → RM ○

There are increased rates of fish tumors and deformities

NEXT STEPS:

- A compilation report of all the fish tumor data is complete and the BUI removal package is developed.

MA ★ DP ★ IP ★ VR ★ RM →

There are health concerns with eating fish and wildlife

NEXT STEPS:

- Continue Mercury and PCB studies(2023).
- Identify and clean up contaminated sites containing mercury and PCBs (through 2023).
- Continue to monitor contaminants in fish tissue following sediment cleanup.

MA → DP → IP ○ VR ○ RM ○

Communities of sediment-dwelling organisms are degraded

NEXT STEPS:

- Continue to clean up polluted sediment sites.
- Restore 1,700 acres of aquatic habitat in the AOC.
- Monitor the recovery of benthic (sediment-dwelling) organisms as sites are restored.

MA ★ DP → IP → VR → RM ○

Water contact through beach use or other recreation is limited

NEXT STEPS:

- Cleanup contaminated sites with body contact restrictions: US Steel and Crawford Creek.
- Design Barkers Island beach restoration to address stormwater, trash, debris and sources identified in the sanitary survey (2018).
- Continue to document permit compliance and improvements to wastewater treatment.

MA → DP → IP → VR ○ RM ○

Appearance of rivers & waterfront needs improvement

BUI REMOVED

This Beneficial Use Impairment's removal phases are successfully completed and a formal BUI removal application has been accepted.

MA ★ DP ★ IP ★ VR ★ RM ★

There are excessive sediments and nutrients

NEXT STEPS:

- Compare historical and recent water quality data to BUI targets.
- Complete WI Bays sediment and nutrient study.

MA ★ DP → IP → VR ○ RM ○

Loss of fish and wildlife habitat

NEXT STEPS:

- Continue to clean up polluted sediment sites in the river.
- Restore 16 sites including aquatic, wetland, dune, tributary, and upland habitat (2025).
- Continue to restore Wild Rice on 275 acres in the AOC.

MA → DP → IP → VR → RM ○

Monitor and Assess (MA) | Develop AOC Projects (DP) | Implement Projects (IP) | Verify Results (VR) | Formal BUI Removal (RM) → BUI REMOVED

← RETURN TO PROCESS STEPS IF TARGETS NOT REACHED